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Attorney Docket No.: SUN03-15(040197)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant(s): Hariprakash GOVINDARAJALU  
Serial No.: 10/807,483  
For: ERROR DETECTING ARITHMETIC CIRCUITS USING HEXADECIMAL  
DIGITAL ROOTS  
Filing Date: March 23, 2004  
Examiner: Unassigned  
Art Unit: 2133

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**Certificate of Mailing Under 37 C.F.R. §1.8**

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, PO Box 1450, Alexandria, Virginia 22313-1450 on:

Date: July 7, 2004

By: Tammy L. Rosado  
(Typed or printed name of person mailing  
Document, whose signature appears below)

Signature: *Tammy L. Rosado*

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Commissioner for Patents  
PO Box 1450  
Alexandria, Virginia 22313-1450

**TRANSMITTAL LETTER**

Sir:

Enclosed is/are:

- [x] Transmittal Letter (this form, 2 pages, in duplicate), Total Pages: 4;
- [x] Information Disclosure Statement, Total Pages: 3;
- [x] PTO-1449 Form, Total Pages: 1;
- [x] A Copy of the cited references are enclosed except for those which qualify under 37 CFR 1.98(a)(2)(i), Total Hard Copy(ies) Provided: 3;
- [x] Return Receipt Pre-paid Postcard (in duplicate), Total Postcards: 2;

U.S. Application No.: 10/807,483

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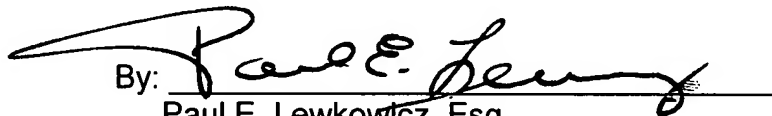
- 2 -

Applicant hereby petitions for any extension of time which is required to maintain the pendency of this case. If there is a fee occasioned by this response, including an extension fee, please charge any deficiency to Deposit Account No. 50-0901.

If the enclosed papers or fees are considered incomplete, the Mail Room and/or the Application Branch is respectfully requested to contact the undersigned collect at (508) 366-9600, in Westborough, Massachusetts.

Respectfully submitted,

By:



Paul E. Lewkowicz, Esq.

U.S.P.T.O. Registration No.: 44,870

Attorney for Applicant

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Attorney Docket No.: SUN03-15(040197)

Dated: July 7, 2004



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Signature: *Tammy L. Rosado*

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PO Box 1450  
Alexandria, VA 22313-1450

**INFORMATION DISCLOSURE STATEMENT**

Sir:

This Information Disclosure Statement is submitted:

☐ under 37 CFR 1.129(a), or (If IDS filed as first/second submission after Final Rejection);

☒ under 37 CFR 1.97(b), or (If IDS Filed within three months of filing national application; or date of entry of the national stage in international application; or before mailing date of first office action on the merits; whichever occurs last);

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- ☐ under 37 CFR 1.97(c) together with either:
- ☐ a Statement under 37 CFR 1.97(e), as checked below, or
  - ☐ a \$180.00 fee under 37 CFR 1.17(p), or (If filed after the 37 CFR 1.97(b) time period, but before final action or notice of allowance, whichever occurs first)
- ☐ under 37 CFR 1.97(d) together with:
- ☐ a Statement under 37 CFR 1.97(e), as checked below, and
  - ☐ a Petition under 37 CFR 1.97(d)(2), and
  - ☐ a \$130.00 petition fee set forth in 37 CFR 1.17(i). (If IDS filed after final action or notice of allowance, whichever occurs first, but before payment of the issue fee)
  - ☐ Applicant requests that the attached IDS and cited reference(s) be placed in the application filewrapper. (If IDS filed after payment of issue fee)

Statement Under 37 CFR 1.97(e)

- ☐ Each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement; or

Enclosed herewith is Form PTO-1449:

- ☒ Copy of the cited references are enclosed except for those which qualify under 37 CFR 1.98(a)(2)(i).
- ☐ Copy of cited references are enclosed except those entered in a prior application, having U.S. Serial No. \_\_\_\_\_, and references that are not required to be submitted under 37 CFR 1.98.
- ☐ The listed references were cited in the enclosed International Search Report in a counterpart foreign application.
- ☒ Pursuant to the Official Gazette Notice of August 5, 2003 the requirement under 37 CFR 1.98(a)(2)(i) for submitting a copy of each cited U.S. patent and each U.S. patent application publication is waived for all U.S. national patent applications filed after June 30, 2003.

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Concise Explanation Requirement (required for non-English references):

- ☐ The "concise explanation" requirement for reference(s) under 37 CFR 1.98(a)(3) is satisfied by:
- ☐ the explanation provided on the attached sheet.
  - ☐ the explanation provided in the Specification.
  - ☐ submission of the enclosed International Search Report.
  - ☐ the enclosed English language abstract.

It is requested that the information disclosed herein be made of record in this application.

Method of payment:

- ☒ No fee is required for this Information Disclosure Statement.
- ☐ Enclosed is a check for \$180.00, which covers the Information Disclosure Fee.
- ☐ A copy of this Statement is enclosed.

Applicant hereby petitions for any extension of time which is required to maintain the pendency of this case. If there is a fee occasioned by this response, including an extension fee, please charge any deficiency to Deposit Account No. 50-0901.

Respectfully submitted,

By:

  
Paul E. Lewkowicz, Esq.

U.S.P.T.O. Registration No.: ~~XXXX~~ 44,870

Attorney for Applicant

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PTO-1449 REPRODUCED		ATTORNEY DOCKET NO.		APPLICATION SERIAL NO.	
INFORMATION DISCLOSURE CITATION IN AN APPLICATION (Use several sheets if necessary)		SUN03-15(040197)		10/807,483	
		APPLICANT Hariprakash GOVINDARAJALU			
		FILING DATE March 23, 2004		GROUP 2133	
U.S. PATENT DOCUMENTS					
EXAM- INER INI- TIAL		DOCUMENT NUMBER	DATE mm/dd/yy	NAME	CLASS SUB-CLASS FILING DATE IF APPROPRIATE
FOREIGN PATENT DOCUMENTS					
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS SUB-CLASS TRANSLATION YES NO
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)					
		B. Parhami, Computer Arithmetic: Algorithms and Hardware Designs, Oxford University Press, New York, (2000)			
		B. Parhami, Computer Arithmetic: Algorithms and Hardware Designs, Instructor's Manual Vol. 2, ISBN 0-19-512583-5, Oxford University Press, New York, (2000)			
		B. Parhami, "A Note on Digital Filter Implementation Using Hybrid RNS-Binary Arithmetic," Signal Processing, Vol. 51, No. 1, pp. 65-67, 1996.			
		B. Parhami, "RNS Representations with Redundant Residues," Proc. of the 35th Asilomar Conf. on Signals, Systems, and Computers, Pacific Grove, CA, pp. 1651-1655, November 4-7, 2001			
		M. J. Flynn, EE 486 Lecture 4: Residue Arithmetic, Jan. 14, 2003, available at http://www.stanford.edu/class/ee486/doc/lecture4.pdf, (last visited 6/2/04)			
EXAMINER			DATE CONSIDERED		